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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,773	05/23/2001	Thomas Patrick Luchino	JDC-375	2425

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EXAMINER
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COLE, LAURA C

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/863,773

Applicant(s)

LUCHINO ET AL.

Examiner

Laura C Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 4-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s): \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 4-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

### ***Claim Objections***

2. Claims 1-3 and 22-25 are objected to because of the following informalities:

Claim 1 Line 9 "said groups" does not appear to have antecedent basis. Does Applicant intend "said sections"? Or does Applicant wish to state in Lines 8-9 "said bristles further arranged in groups according to said diameter range, wherein each of said groups..."? The term "group" is used in Claim 3. In Claim 22 the recitation "said groups" also does not have antecedent basis. And again Claim 23 employs the term "group." Applicant should use consistent terminology. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weihrauch, USPN 5,974,619 in view of Eguchi, USPN 4,963,046.

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Weihrauch discloses a brush having a multiplicity of bristles individually mounted in the toothbrush head (Figure 5), the bristles being mutually spaced by a distance of 0.5 to 4 times the diameter of the bristles (Column 4 Lines 9-11), the bristles being grouped together in sections according to diameter range (Figure 5; Column 3 Lines 36-40). Since Weihrauch discloses that the device is a toothbrush, it is inherent that the toothbrush would have a handle to provide a maneuvering means for cleaning of the teeth. Weihrauch does not disclose a specific bristle diameter.

Eguchi discloses all elements disclosed in the previous office action, Paper No. 6, including a teaching of a toothbrush, having a handle and head, and that a bristle diameter is typically in the range of 6/1000 to 15/1000 inches (0.152mm to 0.381mm) which falls into the range of 0.25mm to 0.60mm.

It would have been obvious for one of ordinary skill in the art to modify the bristle arrangement of Weihrauch, which discloses two sections of bristles varying by diameter, to have one section fall in a range of 0.25mm to 0.34mm and another section having a diameter of 0.35mm to 0.60mm since both ranges fall into a preferred range of diameters for toothbrush bristles.

4. Claims 2 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weihrauch USPN 5,974,619 in view of Eguchi, USPN 4,963,046 and in further view of Berge, USPN 5,836,033.

Weihrauch and Eguchi disclose all elements above, however do not include at least one dense tuft of bristles. As stated above, Eguchi discloses individually

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embedded or mounted bristles that have a preferred diameter that fall in the range from about 0.25 mm to 0.60 mm.

Berge discloses a toothbrush for brushing teeth and massaging gums that comprises a handle (Figure 4 (201)), a toothbrush head distal to the handle (Figures 4, 6, and 7), and both individually mounted bristles (Figure 1; Figures 6 and 7 (304n) and (305n)) and at least one dense tuft of bristles of a circular shape (Figures 6 and 7 (303a); Column 4 Lines 10-14). The individual bristles appear to be mutually spaced apart by a distance ranging from about 0.5 times to about 10 times the diameter of the bristle (as it appears in Figures 1, 6, and 7). The dense tuft of bristles may be distal (as shown in Figures 6 and 7) and serves to further clean the teeth at a different hardness (Column 5 Lines 55-65 disclose that a group of tufted bristles (303a) are relatively soft, and in Column 5 Lines 66-67 disclose that the individually mounted bristles act to massage).

It would have been obvious for one of ordinary skill in the art to modify the toothbrush of Weihrauch and Eguchi to add at least one dense tuft of bristles to the individually mounted bristle arrangement to add an additional softer region of cleaning bristles.

5. Claims 2 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weihrauch USPN 5,974,619 in view of Eguchi, USPN 4,963,046 and in further view of Thompson, USPN 301,644.

Weihrauch and Eguchi disclose all elements above, however do not include at least one dense tuft of bristles. As stated above, Eguchi discloses individually

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embedded or mounted bristles that have a preferred diameter that fall in the range from about 0.25 mm to 0.60 mm.

Thompson discloses a toothbrush for brushing teeth and massaging gums that comprises a handle (Figures 3-7 (a)), a toothbrush head distal to the handle (Figures 3-7), and both individually mounted bristles (Figure 4 (d)) and at least one dense tuft of bristles of a circular cross section (Figures 4 and 9-11, unlabeled). The individual bristles appear to be mutually spaced apart by a distance ranging from about 0.5 times to about 10 times the diameter of the bristle (as it appears in Figure 8). The dense tuft of bristles may be distal (as shown in Figures 4-11).

It would have been obvious for one of ordinary skill in the art to modify the toothbrush of Weihrauch and Eguchi to add at least one dense tuft of bristles to the individually mounted bristle arrangement to add an additional softer region of cleaning bristles.

6. Claims 2 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weihrauch USPN 5,974,619 in view of Eguchi, USPN 4,963,046 and in further view of Libby, USPN 1,251,250.

Weihrauch and Eguchi disclose all elements above, however do not include at least one dense tuft of bristles. As stated above, Eguchi discloses individually embedded or mounted bristles that have a preferred diameter that fall in the range from about 0.25 mm to 0.60 mm.

Libby discloses a toothbrush for brushing teeth and massaging gums that comprises a handle (Figures 1-3 (1)), a toothbrush head distal to the handle (Figures 1-

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4), and both individually mounted bristles (Figures 2 and 4 (14)) and at least one dense tuft of bristles (Figures 2-4 (7)) that is of an elongated rectangular shape (Figures 2-4 (7)). The individual bristles appear to be mutually spaced apart by a distance ranging from about 0.5 times to about 10 times the diameter of the bristle (as it appears in Figure 1). The dense tuft of bristles may be distal (as shown in Figures 1-3).

It would have been obvious for one of ordinary skill in the art to modify the toothbrush of Weihrauch and Eguchi to add at least one dense tuft of bristles to the individually mounted bristle arrangement to add an additional softer region of cleaning bristles.

#### ***Applicants Arguments***

7. In the response, Paper No. 8, filed 06 October 2003 the Applicant contends that:

- A. The Double Patenting Provisional Rejection should be withdrawn.
- B. Eguchi fails to include varying diameters for each bristle group.
- C. Taylor provides a mascara brush and therefore lacks motivation to provided specific spacings between bristles of a toothbrush.
- D. Berge does not teach individually mounted bristles.
- E. Thompson fails to disclose, teach, or suggest a toothbrush comprising groupings of bristles with diameters having differing ranges from 0.25mm-0.34mm and 0.35mm-0.60mm.
- F. Libby in view of Eguchi does not disclose, teach or suggest a toothbrush comprising groupings of bristles with diameters having differing from 0.25mm-0.34mm and 0.35mm-0.60mm.

***Response to Arguments***

8. Applicant's arguments A and C, see Paper No. 8, filed 06 October 2003, with respect to the provisional Double Patenting rejection and the rejection made to Taylor have been fully considered and are persuasive. The rejections of Claims 1 and 3 under 35 U.S.C.101 and 35 U.S.C. 103 to Taylor have been withdrawn.

In regards to the Double Patenting Provisional Rejection, it is noted by the Examiner that copending Application 09/461,891 has been abandoned, and therefore this rejection has been withdrawn.

9. Applicant's arguments B, E, and F, see Paper No. 8, filed 06 October 2003, with respect to the rejection(s) of claim(s) 1-3 and 22-25 under 35 U.S.C. 102 or 35 U.S.C. 103 to Eguchi, Thompson, and Libby have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Weihrauch (in view of Eguchi, Thompson, and Libby) which provides a teaching of having different groups of bristles based on differing bristle diameters (Figure 5; Column 3 Lines 31-36, Column 4 Lines 54-57).

10. Applicant's argument D filed 06 October 2003 have been fully considered but they are not persuasive.

Berge does disclose a toothbrush that comprises individually mounted bristles in Figure 1 and further describes individually mounting bristles in Column 4 Lines 8-14 and Claim 3. Also, see above.



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***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (703) 305-7279. The examiner can normally be reached on Monday-Thursday, 7am - 4:30pm, alternating Fridays. After December 16<sup>th</sup>, the Examiner's office will be located at the new USPTO site in Alexandria, Virginia. After this date, you may reach Examiner Laura Cole by phone at (571) 272-1272 or by fax at (571) 273-1272.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (703) 308-2920 (or after December 16<sup>th</sup>

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may be reached at (571) 272-1281). The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

LCC  
LCC

26 November 2003

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